

## Claims

What is claimed is:

1. A system for viewing data, the system comprising:  
an Internet based data viewing engine; and  
a data store, where the data store holds at least:  
viewable data; and  
metadata associated with the viewable data, the metadata employable by  
the Internet based data viewing engine to control, at least in part, the presentation  
of the viewable data.
2. The system of claim 1 where the metadata can be employed to select one or more  
items of viewable data to be displayed by the data viewing engine.
3. The system of claim 2 where the metadata can be employed by the Internet based  
data viewing engine to dynamically control at least one of the layout and format of the  
one or more items of viewable data selected to be displayed by the Internet based data  
viewing engine.
4. The system of claim 3 where the viewable data is supply chain data.
5. The system of claim 4 where the metadata is supply chain data metadata.
6. The system of claim 5 where the supply chain metadata stores information  
concerning at least one of view heading information, query criteria information, view  
result information, additional information link information, personalization information,  
display parameters, and content parameters.
7. The system of claim 5 comprising a user interface that displays at least one of  
view headings, query results, view results, additional information links and error  
messages.

8. The system of claim 7 where the view results are selectively based on dynamically created SQL statements constructed from column names in the view headings.
9. The system of claim 8 where the additional information links are based, at least in part, on a dynamic determination of the presence of related data in one or more interfaces associated with one or more rows returned in the view results.
10. A method for viewing supply chain data, the method comprising:  
 extracting supply chain data from one or more supply chain members;  
 transforming the extracted supply chain data to one or more common formats;  
 validating the transformed supply chain data;  
 storing the validated supply chain data in a supply chain data store;  
 storing metadata associated with the validated supply chain data in the supply chain data store; and  
 selectively displaying the supply chain data according to at least selection, layout and format information in the metadata.
11. The method of claim 10 where the supply chain data can be extracted from the one or more supply chain members by at least one of pushing data from the one or more supply chain members, pulling data from the one or more supply chain members, a full extraction of supply chain data, a partial extraction of supply chain data, a periodic extraction of supply chain data, a response to a manual trigger, and a response to a data update trigger.
12. A computer readable medium storing computer executable instructions operable to perform the method of claim 11.

13. A data packet adapted to be transmitted between two or more computer processes, the data packet comprising:

a first field adapted to store supply chain data; and

a second field adapted to store metadata associated with the supply chain data in the first field, where the metadata can be employed to control, at least in part, the content, format and layout of the supply chain data stored in the first field when displayed by a generic Internet based supply chain data viewer.

14. A computer readable medium, storing computer executable components of a system for viewing supply chain data, the system comprising:

an Internet based data viewing component; and

a supply chain data storing component adapted to facilitate storing at least:

viewable supply chain data; and

supply chain metadata associated with the viewable supply chain data, the supply chain metadata employable by the Internet based data viewing component to control, at least in part, the presentation of the viewable supply chain data.

15. A virtual private supply chain, comprising:

a data acceptor operable to receive one or more supply chain data items from one or more supply chain members;

a supply chain data store operable to store one or more supply chain data items received from one or more supply chain members; and

a data accessor operable to selectively present one or more supply chain data items stored in the supply chain data store to one or more viewing supply chain members.

16. The virtual private supply chain of claim 15 where the supply chain data store is further adapted to facilitate establishing one or more relationships between a first supply chain data item originating from a first supply chain member and one or more second supply chain data items originating from one or more second supply chain members.

17. The virtual private supply chain of claim 16 where the supply chain data store is further adapted to facilitate establishing an ownership identifier for supply chain data items.

18. The virtual private supply chain of claim 17 where the supply chain data store is further adapted to facilitate establishing one or more access rights to supply chain data items.

19. The virtual private supply chain of claim 18 where the data acceptor is further adapted to transform the received supply chain data to conform with one or more supply chain schema.

20. The virtual private supply chain of claim 19 where the data acceptor is further adapted to validate the transformed supply chain data.

21. The virtual private supply chain of claim 20 where the data acceptor is further adapted to load the validated supply chain data into the supply chain data store.

22. The virtual private supply chain of claim 21 where the data accessor implements row-level supply chain security.

23. The virtual private supply chain of claim 22 where the row-level supply chain security employs at least one of secure socket layers (SSL), digital certificates and encryption.

24. The virtual private supply chain of claim 15 where the one or more supply chain members are configured in a hub and spoke configuration, with the supply chain members located at spokes and at least one of the data acceptor, the data accessor and the supply chain data store located at the hub.

25. The virtual private supply chain of claim 24 where at least one supply chain member implements a connection stream.

26. The virtual private supply chain of claim 25 where the connection stream is adapted to facilitate making communications between the hub and the spoke implementing the connection appear as a stream.

27. The virtual private supply chain of claim 26 where the connection stream is further adapted to facilitate sending, receiving and/or validating BIOs.

28. The virtual private supply chain of claim 27 where the connection stream is further adapted to facilitate selecting an encryption level to be applied to data communicated between the hub and the spoke implementing the connection stream.

29. The virtual private supply chain of claim 24 where one or more supply chain data items may be persisted at one or more spokes.

30. The virtual private supply chain of claim 29 where the persisted items are stored as BLOBS (Binary Large Objects).

31. A computer readable medium storing computer executable components of a virtual private supply chain comprising:

a data accepting component operable to receive one or more supply chain data items from one or more supply chain members;

a supply chain data storing component operable to facilitate storing one or more supply chain data items received from one or more supply chain members; and

a data accessing component operable to selectively present one or more supply chain data items stored by the supply chain data storing component to one or more viewing supply chain members.

32. A method for providing a virtual private supply chain between two or more supply chain members, the method comprising:

- centralizing supply chain data from a plurality of supply chain members;
- conforming the supply chain data to one or more common schema; and
- selectively permitting access to the conformed supply chain data based on row-level security applied to the conformed supply chain data.

33. A method for providing a virtual private supply chain between two or more supply chain members, the method comprising:

- accepting one or more supply chain data items from one or more supply chain members;
- establishing one or more ownership identifiers for the supply chain data items;
- establishing one or more access permissions for the supply chain data items;
- transforming the supply chain data items to conform with one or more supply chain schema;
- validating the transformed supply chain data items;
- storing the validated supply chain data items in a supply chain data store;
- establishing one or more relationships between supply chain data items received from two or more supply chain members; and
- selectively permitting access to one or more supply chain data items based on at least one of the ownership of the supply chain data item, the one or more relationships associated with the supply chain data items, and the one or more access permissions associated with the supply chain data items.

34. A computer readable medium storing computer executable instructions operable to perform the method of claim 33.

35. A data packet adapted to be transmitted between two or more computer processes, the data packet comprising:

a first field adapted to store a supply chain data item; and  
a second field adapted to store one or more access permissions associated with the supply chain data item.

36. A data packet adapted to be transmitted between two or more computer processes, the data packet comprising:

a first field adapted to store a supply chain data item; and  
a second field adapted to store information concerning one or more relationships with one or more other supply chain data items in which the supply chain data item is involved.

37. A method for providing a virtual private supply chain between two or more supply chain members, the method comprising:

means for collecting supply chain data from a plurality of supply chain members;  
means for standardizing the collected supply chain data to one or more supply chain schema; and  
means for securely accessing the collected supply chain data.